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# **ABSTRACT**

The extent to which teachers at an elementary and secondary school in a rural town in the mid-south administered the Missouri Mastery and Achievement Tests (MMAT) in accordance with standardized procedures was studied. In addition, the teachers' general test-taking considerations, standardized test administration procedures, and test-wiseness were examined. Nine teachers at an elementary and secondary school participated. The school has approximately 246 students, all Caucasian, enrolled in grades K-12. Observation and survey responses provided the data. Findings supported previous research findings that teachers who administer a standardized test tend to do so in an unstandardized manner, making errors in reading directions and cueing correct answers, and in making inappropriate responses to questions. Deviating from standardized procedures was usually in order to assist students' test performance. To make test administration more consistent, additional teacher training is required. (Contains 2 tables and 13 references.) (SLD)

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Nonstandardized Administration of th Missouri Mastery

and Achievement Tests

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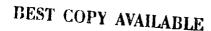
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In schools, teachers comprise the personnel that administer standardized group achievement tests. These tests provide the primary basis for judgments about students' educational progress (Wodtke, Harper, Schommer, & Brunelli, 1989) as well as holding teachers accountable for students' learning. One illustration of teacher accountability comes from a Missouri West Plains Daily Quill article about a rural school, having lost its accreditation at one time, with a "MMAT policy covering teacher evaluations which stated, '50 percent of your students must master at 80 percent (competency) or above on each key skill (tested by MMAT)'" (1993, p. 1). Because of the heavy reliance, some would say overreliance, on standardized test scores, it is critical that these tests be administered in a standardized manner (Anastasi, 1988). Failure to administer tests in a manner that conforms with how the test was administered to the normative sample may result in test scores being less reliable and less valid than depicted by the test publishers.

Even with the attention paid to standardized test results (Smith, 1991), no training is required of teachers other than to become familiar with the standardized test procedures in the teacher's manual (Anastasi, 1988). This is true even though studies (e.g., Impara, Plake, & Fager, 1993; Kauchak, Peterson, & Driscoll, 1985) suggest that teachers possess negative attitudes regarding standardized test use. The extent to which these negative attitudes influence teachers' administration of tests in a standardized way is, at this time, not known.

Limited studies (Horne & Garty, 1981; White, Taylor, Carcelli, & Eldred, 1981; Wodtke, Harper, Schommer, & Brunelli, 1989; Slate & DeMaine, 1994) have been conducted regarding observations of classroom teachers' administration of group achievement tests. Findings of these studies have consistently supported the idea that teachers do not adhere to test manual standardized procedures. That is, teachers have been found to deliberately modify test directions and questions (Horne & Garty, 1981) and time limits (Wodtke et al., 1989) in an attempt to help students perform better on the test. White et al. (1981) reported that half of their sample of teachers, in direct violation of test





procedures, repeated test questions. Most recently, Slate and DeMaine (1994) reported that all of the teachers in their sample failed to follow directions, answered student questions in ways that conflicted with the test manual, and provided students with words that were more familiar than those in the test question or direction.

In this study, we were interested in determining the extent to which teachers at an elementary and secondary school in a rural town in the Midsouth administered the Missouri Mastery and Achievement Tests (MMAT) in accordance with standardized procedures. Moreover, we investigated teachers' "general test-taking considerations, standardized test-administration procedures, and test-wiseness" (Johns & VanLeirsburg, 1991, p.4). We selected the MMAT because it was developed by the Missouri Department of Elementary and Secondary Education to be used by public schools of Missouri. Although most public schools in Missouri have been administering the MMAT since 1985, very few studies are available with this particular test.

#### Method

Participants were 9 teachers (6 females, 3 males) at an elementary and secondary school in a rural town in a Mid-South state. The school has approximately 246 students, all Caucasians, enrolled in grades K-12. The elementary has one classroom per grade and grades seventh through twelfth are in the same building. The mean age of teachers in our study was 37.2 years (ages ranged from 23 to 57). Years of teaching experience ranged from 1 to 21 ( $\underline{M}$  = 6.1 years). Five teachers who participated in this study taught at the elementary grades and three teachers taught at the secondary level. One teacher did not provide this information.

During the administration on the MMAT, the senior author observed teacher behaviors in the following areas of test administration: directions, cueing correct answers, responses to questions, and word substitutions. A frequency count was used to record each time an error occurred in any category. The number of observation sessions ranged from 1 to 3 for each teacher, with a total of 18 test administrations during which data were



collected. Every teacher who was involved in administering the MMAT completed an 11 item questionnaire on a 5 point likert format (i.e., strongly agree to strongly disagree) which dealt with standardized test administration approximately one week before the MMAT was administered. The questionnaire, shown in Table 1, was adapted from Johns and Davis (1991).

Insert Table 1 about here

# Results

All 9 teachers committed errors (Ms ranged from 1.0 to 33.0) in administering the MMAT in a standardized manner with an overall mean of 10.2 errors per test administration session observed. Teachers exhibited errors in all four areas of standardization observed: not following procedures (57% of total errors), cueing of correct answers (21%), inappropriate responses to student questions (15.8%), and modifying directions (5.5%). Table 2 shows that teachers made the fewest errors in word substitutions when reading test directions.

Insert Table 2 about here

All nine teachers who completed the survey agreed to some degree students should be informed a few days in advance that they will be taking a test, and also test purposes or intents should be explained to students before the testing date. Five of the nine participants agreed that standardized tests should be given in the same manner as teacher-made tests. Six of the nine teachers agreed the directions of standardized tests should be read directly out of the teacher's manual. Eight of the nine teachers either agreed or were undecided about teachers giving special assistance to poor readers by reading the standardized test items aloud. This procedure would be in direct violation of standardized test procedures. Seven of the nine educators agreed about using class time to teach test taking skills to students, and they should



become familiar with the mechanics of a standardized test before actual testing begins through the use of practice tests. Seven of the nine teachers agreed they should remove all charts or bulletin boards that might cue the students when answering the test questions. Six teachers agreed and two were undecided about teachers should substitute words in giving directions to help students understand the directions better. Thus, only one teacher was supportive of actually following the directions according to the prescribed manner. Out of the nine educators, five agreed that time limits should rigidly be adhered to in starting and stopping subtests.

## Discussion

Our findings replicate those of previous studies (Horne & Garty, 1981; White, Taylor, Carcelli, & Eldred, 1981; Wodtke, Harper, Schommer, & Brunelli, 1989; Slate & DeMaine, 1994) that educators who administer standardized tests tend to do so in a nonstandardized fashion. We found that teachers exhibited errors in reading test directions, cueing correct answers, and inappropriate responses to questions. These type of errors were the same type of errors committed by teachers in previous studies.

Our study extends previous observational studies of teachers' behaviors by querying teachers regarding their attitudes toward administration of standardized tests. Our sample expressed support for behaviors that should enhance students' test performance, through reading items to poor readers and substituting more familiar for less familiar words, even though these behaviors are direct violations of standardized procedures. These findings are supportive of Horne and Garty (1981) and Wodtke et al.'s (1989) assertion that teachers may fail to follow standardized procedures in order to assist students' test performance.

If teachers are to continue their responsibility for administering standardized tests, then school districts need to ensure that their personnel are sufficiently educated regarding the importance of adhering to standardized testing procedures. Materials such as videotapes (e.g., Taylor, 1981) are available for teachers to view before administrating standardized tests. In



addition, teacher education programs should examine carefully the manner in which they are educating their students about standardized tests. Clearly, teacher education students and classroom teachers need to be better educated about adherence to standardization.

Generalizations from this study, because of its limitations, should be carefully made. Our teacher sample ( $\underline{n}$  = 9) was very small and was only from one school. Even so, our findings are consistent with those of previous studies that standardized group achievement tests are likely to be administered in nonstandardized ways.

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Table 1

<u>Teachers' Responses to Survey Questions.</u>

	SA	AG	UN	DAG	SDAC
Students should be informed a few days in advance that they will be taking a test.	6	3			
Test purposes or intents should be explained to students before the testing date.	4	5			
Standardized tests should be given in the same manner as teacher-made tests.	2	3	3	1	
Teachers should read the directions of standardized tests directly out of the teacher's manual.		6	2	1	
Teachers should give special assistance to poor readers by reading the standardized test items aloud.	1	3	4	1	
Using class time to teach test taking skills can be productive for students.	3	4	2		
Students should become familiar with the mechanics of a standardized test before actual testing begins through the use of practice tests.	5	2	2		
Teachers should remove all charts or bulletin boards that might cue the students when answering the test questions.	2	6		1	
Teachers should substitute words in giving directions to help students understand the directions better.	2	4	2	1	
Time limits should rigidly be adhered to in starting and stopping subtests.		2	3	3	_ 1

SA = Strongly Agree; AG = Agree; UN = Undecided;

DAG = Disagree; SDAG = Strongly Disagree



Table 2

Administration Errors by Type and Teacher.

Type of Error	Teacher										
	1	2	3	4	5	6	7	8	9	#	%age
Errors in Directions	24	25	1	15	8	19	8	1	4	105	57
Cueing Correct Answers	32		4	3						39	21
Inappropriate Responses to Questions	10	4	3	8	1	1	2			29	15.8
Word Substitutions			7	2				1		10	5.5
Sessions Observed	2	2	2	3	2	2	2	2	1	18	
Mean Errors	33	14.5	7.5	9.3	4.5	10	5	1	4	10.2	

